SITE IDENTIFICATION				
Site Name: Hunters Point Naval Shipyard			EPA ID:	
Subject: Five Year Review			Time: 12 pm	Date: 2/22/2018
Type: [FORMCHECKBOX] Telephone [FORMCHECKBOX] Visit [FORMCHECKBOX] Email [FORMCHECKBOX] Other				
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SUMMARY OF CONVERSATION				

1. What is your overall impression of the cleanup work conducted at Hunters Point Naval Shipyard (HPNS) over the period of the fourth Five-Year Review (2013 to present)?

I have been working on HPNS since June 2014. My overall impression of the cleanup work at HPNS is that the Navy has made this cleanup project a high priority and a great deal of Navy resources and effort are going into the cleanup. The emergence of widespread falsification of radiological data by Tetra Tech EC Inc. has been a significant problem that will require substantial rework and that has undermined trust in the integrity of the cleanup by all stakeholders. The vast scope of the signs of falsification found is unprecedented nationally. As EPA wrote in December, 2016, "the Navy's technical review needs to be comprehensive and holistic to scientifically address protectiveness questions. In addition, proactive and transparent community involvement will be key to address public confidence in the scientific review and its conclusions."

2. Have there been routine communications or activities (site visits, inspections, reporting activities, etc.) conducted by your office regarding to the site? If so, please give purpose and results.

Over the past five years, U.S. EPA has worked with its state and local regulatory partners to conduct periodic onsite inspections of the Navy's cleanup work at HPNS to understand field conditions. Originally EPA did joint inspections with the State Regional Water Quality Control Board and the State Department of Toxic Substances Control (DTSC). In 2104, because community members continued to raise concerns about dust, EPA also invited the Bay Area Air Quality Management District inspectors to join inspections, and we observed gaps in dust control during such field visits. The Navy improved its dust control practices, and dust complaints have decreased. More recently, the State of California Department of Toxic Substances Control has started sending Industrial Hygienists to perform regular inspections at the site. Reports of those appear on the DTSC's website. They have made no observations of violations. EPA also attends regular monthly BRAC Cleanup Team (including Navy, EPA, and the State) where we review the status of ongoing cleanup actions and provide input.

However, given the egregious failures by Tetra Tech EC Inc. to follow its own workplans, more oversight is clearly necessary. Therefore, EPA has gathered a team of national expert health physicists and a statistician to do detailed reviews of Tetra Tech EC Inc. previous work and Navy plans for rework. When resampling of these locations is conducted, EPA and its state regulatory partners commit to monitoring the rework in person at the site.

3. Have there been any complaints, violations, or other incidents related to the site requiring a response by your office? If so, please give details of the events and results of the responses.

EPA receives frequent strong complaints from stakeholders regarding concerns about health risks and about meaningful community involvement. EPA also receives frequent press questions. The predominant concern in the last five years by far has been the falsification of radiological data by Tetra Tech EC Inc.

Examples of radiological-related activities that have prompted regular discussion amongst EPA, the Navy, and stakeholders include the following:

• the Nuclear Regulatory Commission (NRC) documented violations regarding soil in trenches in one part of Parcel C.

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- Non governmental organizations have filed petitions to the NRC and to the State that are relevant to radiological cleanup at this site.
- EPA stated in its comments to the Navy on its Draft Radiological Data Evaluation for Parcels B and G, "The data analyzed demonstrate a widespread pattern of practices that appeared to show potential deliberate falsification, potential failure to perform the work required to ensure ROD requirements were met, or both. The data revealed not only potential purposeful falsification and fraud in terms of sample and/or data manipulation, they also reveal the potential failure to conduct adequate scans, a lack of proper chain of custody for ensuring samples were not tampered with, extensive data quality issues (including off-site laboratory data) and general mis-management of the entire characterization and cleanup project."

The above are serious concerns. The Navy, as the lead on cleanup, has responded through a comprehensive radiological data evaluation, increased oversight of ongoing radiological work, development of plans to resample all radiological survey units on site that involved Tetra Tech EC Inc., and increased community involvement outreach. In its oversight role, EPA has also significantly increased its resources devoted to all these steps to ensure protectiveness at the site. EPA staff also participate in Navy community outreach events (community meetings and bus tours) to ensure community members get the information they need on the cleanup and can express their concerns. EPA also provides input to the Navy on how to make community involvement practices more effective.

4. Do you feel well informed about the site's activities and progress?

The BRAC Cleanup Team meets monthly and the Navy project managers provide general updates on some cleanup project at HPNS. The Navy also provides updates to the comprehensive project schedule under the HPNS Federal Facility Agreement (FFA), which identifies major milestones in each parcel. In addition to the technical deliverables required under the FFA, Navy project managers email me and my State counterparts with project updates and uses technical meetings to solve more complex issues concerning a cleanup project area. The amount of information provided at the BCT Meetings, especially with respect to non-radiation sites/issues, has decreased over the past five years. Thus, at times EPA has sometimes not understood the Navy's intentions when we have received documents for review, so more discussion, longer comments, and more meetings have been needed. As another example, the Navy changed the locations of wells in the Basewide Groundwater Sampling Plan without prior notification and justification to the regulatory agencies. More proactive sharing of information would improve efficiency in document reviews and ensure adequate oversight.

5. Do you have any comments, suggestions, or recommendations regarding the site?

As EPA stated in its comments on the draft Radiological Data Evaluation Report for Parcels B and G, "In the bigger picture, beyond the scope of this specific Report, prior to resampling efforts, a thorough review of work plans, process review, documentation, and data quality should be of primary concern to ensure that high quality defensible data is obtained. Ongoing onsite oversight by the Navy and regulatory agencies should be conducted frequently." The Navy hired a third-party contractor for oversight of ongoing radiological work, both in the field and review of procedures and documents. This practice is helpful and should be expanded. More broadly, please address in the Five-Year Review the steps the Navy has already taken and will take in the future to improve contractor oversight.

In addition, the radiological data falsification has dramatically increased the level of community concern about health risks and credibility of the cleanup. As EPA wrote in 2016 recommendations for the Tetra Tech EC Inc. evaluation, "The overall objective of the following recommendations is to maximize public confidence in the Tetra Tech investigation process by establishing a consistent flow and transparent exchange of information with the public as the Navy's workplan unfolds. Consistently throughout the process, not just at project milestones, the community is expected to be 'brought along' for input and participation with regulators as investigatory processes

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are established and decisions are made." While the Navy has stepped up its community involvement efforts, EPA continues to recommend more practices to improve meaningful dialogue, e.g. that the Navy should fully advertise all its public presentations, including those hosted by other organizations and that the Navy should be ready to discuss radiological issues upon request in an open forum at any public meeting, not just at those where that is the advertised topic. Also, EPA has repeatedly recommended that the Navy, as the lead on the cleanup, attend local community meetings, especially when invited to do so. These recommendations should be part of the 2018 Community Involvement Plan update. Doing so will help maximize the opportunity for the public to receive factually correct information and will demonstrate that the Navy is committed to a transparent process.

As part of this Five-Year Review, the most current information related to potential climate change impacts should be evaluated to ensure protectiveness of site remedies. For example, please review the containment plans for the landfill using the most current projections for sea level rise.

Please address PFAS compounds in the Five-Year Review. The military specifications for aqueous film forming foam (AFFF) were adopted in December 1969, so AFFF could have been used to fight fires for about 4 to 5 years. In addition, starting in the early 1950s, PFAS compounds were added to liquids for nearly every process involved in plating. PFAS compounds were also used in liquid shields to reduce vapors from plating operations.

